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March 1, 2006
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City of Morro Bay
Department of Public Services
955 Shasta Ave
Morro Bay, CA 93442

Attention: Mr. Bruce Keogh, Wastewater Division Manager

Subject: Re-issuance of the 301(h) Waiver, Response to Comments by CEA Engineers, P.C. dated February 1, 2006

Dear Mr. Keogh:

Carollo Engineers, P.C. in response to the comments submitted by Carpenter Environmental Associates, Inc. (CEA) provides the following comments. Specifically, Carollo will address the issues of the time line and the project costing. Other comments are also included for reference and/or comment by others. Carollo finds that CEA has provided information of interest, but that the information is mostly a broad-brush discussion of wastewater treatment and potential impacts and does not specifically address the impacts at Morro Bay/Cayucos. Further, although the time lines suggested by CEA could be met in an ideal situation, it is clear that the 9-1/2 year Conversion Schedule proposed by the RWQCB is well within the range of time lines that actually occur in California and specifically California Coastal Communities. To shorten the time line would limit local users full public involvement and discussion on the environmental, social, and economic issues that other similar communities have been afforded.

EVALUATION OF SECONDARY TREATMENT UPGRADE SCHEDULE
(pages 4 through 8)

In the first three paragraphs, CEA states that the time lines can be completed in 4-1/2 years or a less demanding 6-1/2 years "plus time for the Regional Water Quality Control Board (RWQCB) to review the facilities plan." Carollo points out that the 9-1/2 year plan presented in the RWQCB Conversion Schedule includes time for RWQCB review. It is reasonable to add at least six months to the CEA schedules for reviews. The NRDC challenge to the current first step for conversion substantiates the probability that RWQCB reviews will require more than a normal review period. Therefore, CEA's time lines are, at a minimum, 5- and 7-year time lines. As Carollo interprets the NRDC/CEA discussion, the question becomes whether there is a need to accelerate the schedule by 2-1/2 years. Without a documented environmental excursion attributable to the discharge, the answer seems to be 'NO'. Our comments on the remainder of this section follow.

Report Staff Issues (pages 5 and 6)

In first paragraph under this heading, CEA makes the argument that there is nothing unusual or complex about the engineering on this project and therefore the time line should be shorter. They add that even Carollo has completed similar projects in shorter time lines. Carollo reiterates that the 9-1/2 year time reflects a reasonable time line for resolution of environmental, social, and economic issues and is supported by similar project schedules near Morro Bay Cayucos unlike the generic references made by CEA.

The first example is the nine-year City of Pismo Beach project. Pismo Beach needed to make a decision to replace or rehabilitate it's wastewater treatment plant. The engineering issues were straightforward. The social and economic issues were perceived to be substantial by the City Council and ratepayers. The City issued an engineering studies Request for Proposals late in 1998. A final design notice to proceed was issued on November 27, 2000. The project was 90 percent constructed as of February 28, 2006. It is anticipated that Pismo Beach will achieve full compliance utilizing the new facilities by September 2006. Considering that the internal negotiations leading up to the beginning of the engineering studies took no less than one year, the Pismo Beach project will have stretched out nine years. This demonstrates that the Morro Bay Cayucos project time line is within normal time parameters for communities of similar size and treatment complexity in the California Central Coast area.

Carollo can cite many other community efforts as examples of nine year plus time lines. The community of Los Osos is a community immediately adjacent to Morro Bay Cayucos that has taken decades to address environmental, social, and economic issues, and has not yet made progress toward construction of a wastewater treatment plant.

A brief search of projects in California coastal communities showed nine plus year project intervals for Half Moon Bay, Watsonville, and Los Osos. Attachment 1 to this letter provides the information on these cities. We also found references for a New York facility and a facility near San Diego, areas where CEA attributes their consulting services, which also have nine plus year project schedules (Attachment 1).

In paragraphs two and three, CEA comments that the issue of secondary treatment should be separated from tertiary treatment physically and financially. This is conventional engineering wherein the two processes are not interwoven. At Morro Bay Cayucos, Carollo has had extensive discussions on the benefits of Membrane Bioreactors (MBRs) wherein the secondary and tertiary processes are combined. This may provide long-term economy and more importantly provide substantial savings in valuable land utilization. The MBR process provides a higher quality effluent than traditional tertiary treatment and requires much less land area. In the absence of any documented environmental excursions attributable to the Morro Bay Cayucos discharge, the local users must be afforded the necessary time to evaluate the method of achieving tertiary treatment.

In paragraphs four and five, CEA discusses the lack of local commitment, the lack of consequences, and reference to unforeseen circumstances that impact the schedule. The outcome of the discussions with the RWQCB is the agreed Conversion Schedule that

provides for a higher level of responsibility on the part of Morro Bay Cayucos. Morro Bay Cayucos is moving in the right direction with a higher level of responsibility to perform.

Carollo Schedule (pages 6, 7, and 8)

Paragraphs one and two criticize Morro Bay Cayucos for delays and suggest what 'could-have-been'. This does not seem to be the appropriate role of a technical consultant. The facts are that Morro Bay Cayucos is now committing to the 9-1/2 year schedule, the schedule will be embedded in an agreement with the regulatory agency, and Morro Bay Cayucos is already improving on the schedule by requesting engineering proposals ahead of schedule. In Carollo's opinion, the system is working.

Paragraphs three, four, and five describe how several months can be shaved from each time line segment and how segments can be overlapped. As Carollo has described in our paragraphs above for other communities in the vicinity of Morro Bay Cayucos, shaving time away from the Conversion Schedule will likely curtail the users opportunity to provide full comment on the environmental, social, and economic issues that other similar communities have been afforded.

CEA's Schedule (page 7 and 8)

The paragraph and table in this section summarize CEA's shortened schedules. CEA list a 6.6-year schedule as a 'more relaxed' schedule 'plus time for RWQCB facilities plan review.' As indicated above, this is essentially a 7-year schedule compared to the Conversion Schedule proposed by the RWQCB.

The conclusion by CEA is that this "reflects typical engineering and project planning approaches in the (engineering) field". Carollo has provided references for several communities in the immediate area and nationwide (including New York and the San Diego area where CEA represents clients) which have taken nine and more years to complete similar projects. Therefore, it is reasonable to conclude that the 9-1/2 year Conversion Schedule provides Morro Bay Cayucos users appropriate time for environmental, social, and economic review that other similar communities have been afforded.

Please contact me if you have any questions or comments.

Sincerely,

CAROLLO ENGINEERS, P.C.

David L. Stringfield, P.E.

DLS:cjp

Attachment 1, Wastewater Treatment Projects: 9+ year duration

ATTACHMENT 1

CITY OF MORRO BAY CAYUCOS SANITARY DISTRICT

Wastewater Treatment Projects: 9+ year duration

Location: Half Moon Bay, CA
Project: Expansion of Secondary Treatment
Information Source: Personal communication with Mike Britten, Carollo Engineers

Task	Date of Completion
Proposal	1989
Pre-design, Design, Evaluation	1993
Permitting and Financing	1995
Construction	1998

Location: Watsonville, CA
Project: Implementation of Recycled Water Facility
Information Source: Personal communication with Rick Chan, Carollo Engineers

Task	Date of Completion
Initial Studies and Pilot Testing	1999
Planning	April 2002
Pre-designs	April 2004
Permitting and Financing	In progress
Construction	Summer 2008 (predicted)

Note: There have been funding disputes, which have delayed the completion of designs and beginning of construction.

Location: Los Osos, CA
Project: Installation of Community-Wide Wastewater System
Information Source: Regional Water Quality Control Board

Task	Date of Completion
Initial Planning	1984
Permitting	1991-2004
Final Project Report	2001
Design and Redesign	2004
Construction	????

Note: The installation of the Los Osos Wastewater System has been delayed due to several years of litigation by sewer opponents including CAWS (Citizens for Affordable Wastewater Systems), TAPPS (Taxpayers Against Percolation Ponds), and Concerned Citizens of Los Osos.

Location: Imperial Beach, CA (South Bay International Wastewater Treatment Plant)
Project: Design and construction of wastewater treatment plant with secondary level treatment and ocean outfall.
Information Source: USBIWC Public Meeting Presentation, August, 2005

Task	Date of Completion
Congress authorized funds for WWTP	1989
ROD Identified Activated Sludge Secondary Treatment	1994
ROD Identified Ponds as Secondary Treatment	1999
Award Design and Construction	Dec. 2005 (predicted)
Construction	Aug. 2008 (predicted)

Note: Lawsuits were filed by the Sierra Club and Surfrider Foundation for failure to consider ponds rather than activated sludge for secondary treatment. In the interim, the plant operates at advanced primary treatment levels.

Location: Newtown Creek, NY
Project: Newtown Creek Water Pollution Control Plant Expansion and Upgrade
Information Source: http://www.water-technology.net/projects/newtown/

Task	Date of Completion
Begin construction	2003
End plant construction	2008 (predicted)
End final construction	2013 (predicted)

Note: Newtown Creek plant is a 53-acre facility. Estimated contract value of $493 million to upgrade to compliance to the Clean Water Act. Expansion from 317 mgd to 396 mgd.